PERGAMON

Computers in Biology and Medicine

www.elsevier.com/locate/compbiomed

PII: S0010-4825(01)00030-0

CONTENTS OF VOLUME 31

Number 1

Samuel J. Wang, Lucila Ohno-Machado, Hamish S. F. Fraser and R. Lee Kennedy 1 Using patient-reportable clinical history factors to predict myocardial infarction

Georgia D. Tourassi, Erik D. Frederick, Carey E. Floyd Jr. and R. Edward Coleman 15 Multifractal texture analysis of perfusion lung scans as a potential diagnostic tool for acute pulmonary embolism

Ofer Barnea and Gabriel Gillon 27 Model-based estimation of male urethral resistance and elasticity using pressure–flow data

Fumikazu Miwakeichi, Ruben Ramirez-Padron, Pedro A. Valdes-Sosa and Tohru Ozaki 41 A comparison of non-linear non-parametric models for epilepsy data

Anqi Qiu and Jing Bai 59 Multiple modeling in the study of interaction of hemodynamics and gas exchange

Number 2

F.H.H. Al-Ghorabie, S.S.A. Natto and S.H.A. Al-Lyhiani 73 A comparison between EGS4 and MCNP computer modeling of an in vivo X-ray fluorescence system

Francisco J. Sanchez-Marin 85 Automatic recognition of biological shapes using the Hotelling transform

Lawrence T. Wang, Timothy D. Solberg, Paul M. Medin and Rex Boone 101 Infrared patient positioning for stereotactic radiosurgery of extracranial tumors

Andrea Tura and Silvio Cavalcanti 113 Numerical simulation of flow oscillations in stenotic arterial segment

Abdel-Ouahab Boudraa, Faiza Behloul, Marc Janier, Emmanuelle Canet, Jacques Champier, J.-P. Roux and Didier Revel 133 Temporal covariance analysis of first-pass contrast-enhanced myocardial magnetic resonance images

143 Erratum

Number 3

Special issue: Goal-oriented model-based drug regimens

Roger W. Jelliffe and Pascal Maire 145 Goal-oriented, model based drug regimens

Dominique Breilh, Marie-Claude Saux, Pascal Maire, Jean-Maurice Vergnaud and Roger W. Jelliffe 147 Mixed pharmacokinetic population study and diffusion model to describe ciprofloxacin lung concentrations

Dominique Barbolosi and Athanassios Iliadis 157 Optimizing drug regimens in cancer chemotherapy: a simulation study using a PK–PD model

Daniel Claude 173 An illuminative example of nonlinear identification

L. Pronzato and A. Pázman 179 Using densities of estimators to compare pharmacokinetic experiments

M. Milman, F. Jiang and R. Jelliffe 197 Creating discrete joint densities from continuous ones: the moment matching-maximum entropy approach

Number 4

Agnès A. Dorion, Olivier Salomon, Michel Zanca, Michel Duyme and Christiane Capron 215 Magnetic resonance imaging and cerebral volumic evaluation: comparison of four post-processing techniques

İnan Güler, Firat Hardalaç and Serdar Müldür 229 Determination of aorta failure with the application of FFT, AR and wavelet methods to Doppler technique

Jorma Laurikkala, Martti Juhola, Seppo Lammi, Jorma Penttinen and Pauliina Aukee 239 Analysis of the imputed female urinary incontinence data for the evaluation of expert system parameters

G. Deléage, C. Combet, C. Blanchet and C. Geourjon 259 ANTHEPROT: An integrated protein sequence analysis software with client/server capabilities

A. Naressi, C. Couturier, I. Castang, R. de Beer and D. Graveron-Demilly 269 Java-based graphical user interface for MRUI, a software package for quantitation of in vivo/medical magnetic resonance spectroscopy signals

Number 5

A.B. Gumel, T.D. Loewen, P.N. Shivakumar, B.M. Sahai, P. Yu and M.L. Garba 287 Numerical modelling of the perturbation of HIV-1 during combination anti-retroviral therapy

M. Bernaschi and F. Castiglione 303 Design and implementation of an immune system simulator

Ming-Dar Tsai, Ming-Shium Hsieh and Shyan-Bin Jou 333 Virtual reality orthopedic surgery simulator

E. Shalman, C. Barak, E. Dgany, H. Noskowitcz, S. Einav and M. Rosenfeld 353 Pressure-based simultaneous CFR and FFR measurements: understanding the physiology of a stenosed vessel

S. Hyun, C. Kleinstreuer and J.P. Archie Jr 365 Computational particle-hemodynamics analysis and geometric reconstruction after carotid endarterectomy

Markku Siermala, Martti Juhola and Mauno Vihinen 385 On preprocessing of protein sequences for neural network prediction of polyproline type II secondary structures

D. Benitez, P.A. Gaydecki, A. Zaidi and A.P. Fitzpatrick 399 The use of the Hilbert transform in ECG signal analysis

Number 6

C.S. Herrmann, T. Arnold, A. Visbeck, H.-P. Hundemer and H.C. Hopf 407 Adaptive frequency decomposition of EEG with subsequent expert system analysis

Zhong Zhang, Hiroaki Kawabata and Zhi-Qiang Liu 429 Electroencephalogram analysis using fast wavelet transform

İnan Güler, M. Kemal Kiymik, Mehmet Akin and Ahmet Alkan 441 AR spectral analysis of EEG signals by using maximum likelihood estimation

Richard Cooper, Cosmin Cardan and Robert Allen 451 Computer visualisation of the moving human lumbar spine

Chuang-Chien Chiu and Shoou-Jeng Yeh 471 Assessment of cerebral autoregulation using time-domain cross-correlation analysis

Helen Hong, Stefan Grosskopf and Myoung-Hee Kim 481 Ventricular shape visualization using selective volume rendering of cardiac datasets

Richard M. Spencer, Jeffry D. Schroeter and Ted B. Martonen 499 Computer simulations of lung airway structures using data-driven surface modeling techniques

İnan Güler and Serdar Müldür 513 A model approach to sharing electronic medical records between and within the state hospitals in Turkey

Book review 525

Announcement 527

III Contents of Volume 31

VI Author Index